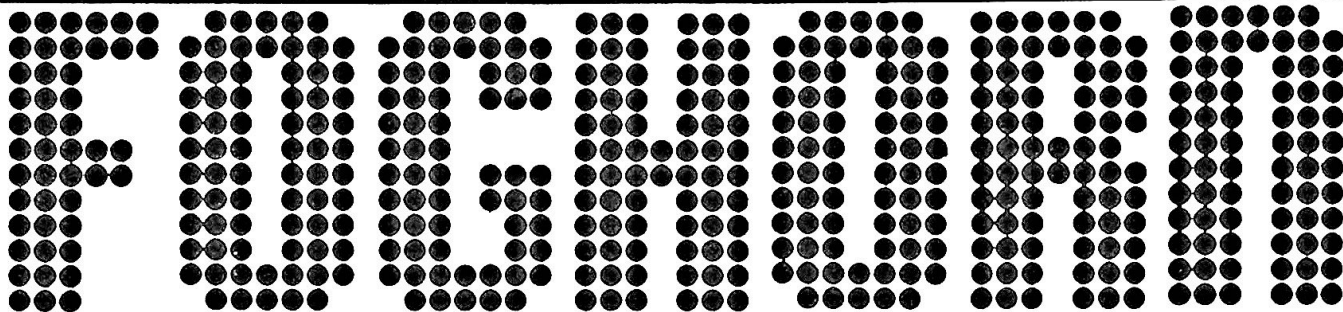




THE OFFICIAL NEWSLETTER OF THE FIRST OSBORNE GROUP

Vol. 1 No. 8

(Non-Member price \$1.50/copy)

FOG

MAY 1982

The First Osborne Group (F O G) has been formed as a users group for all persons who use or are interested in Osborne Computers. Membership is available to any interested party whether or not they currently own an Osborne Computer. Dues are \$24.00/yr. in U.S., \$30.00/yr. elsewhere.

OFFICERS IN THE F O G

President/Founder Frank Morton
Disk Librarian Kent Walker

Vice President. Jeri Edwards
Technical Counsel Byron A. McKay
Correspondence Secretary Gale P. Rhoades
(Non-Member price \$1.50/copy)

Treasurer. Leo. E. Grandi
Editor, FOGHORN David M. Gates

NEXT MEETING: 7:30 p.m., Thursday, May 20, 1982

The Dysan Corporation Auditorium
5201 Patrick Henry Drive
Santa Clara, CA

FOGHORN DEADLINE—All material for the June FOGHORN must be submitted by May 29th.

FROM THE FOG

by Frank Morton

There is a growing tide of requests for help from "beginners". I put the word in quotes because they are generally talented professional persons who just do not happen to have experience with computers. A recent letter suggested that we (FOG) collectively create a "Complete Idiots' Guide to the Osborne 1". He thinks we might wait for our copies of the new OCC Manual, but if it is still needed that we "do it just for the joy of spreading information among the savage uninformed". Others write that they have seen the new manual and it may be an improvement but they think it still leaves a lot to be desired from the viewpoint of computer novices.

First of all, we hear you and we understand what you are saying. What is more, we do want to help. We were all there once, but it is incredible how easy it is to forget what it was like those first frustrating weeks once one gets familiar with the machine. Please help us to help you by keeping notes on what caused you troubles as you are beginning. Second, Byron McKay has already started writing a book entitled something like "The Idiots' Guide to an Osborne". He thought that the new manual had done him in, but is now back at work on it. Third, Pico-Net (formerly Info-Net) has decided to leave the 1st Thursday Workshops at Dysan to "the FOGGIES", so we hope to turn at least part of it into a Beginners' Tutorial type workshop. Again, please help by letting us know what things need to be explained. Fourth, it is our intent to publish the phone numbers of all FOG members in this edition of the FOGHORN. As of 1 May that is over 500 members in 42 states and 5 other countries. This should help a lot, because Self-Help or the "Buddie System" is the best way to learn (at least that has been my experience). I knew FORTRAN before I got my O-1, but I didn't know a thing about CP/M or WordStar, etc. David Oates and I have literally taught each other WordStar on the fly as we have created past issues of the FOGHORN. (When you look over past issues, please tell us you can notice an improvement!) We can all learn from each other, and it can be a lot of fun "discovering" new features with someone else.

One other point before I close. Do not be afraid to EXPERIMENT! If you have your software backed up and are working with a copy, making an error in your command is not likely to do anything worse than make it

necessary to press the RESET button, causing you to loose some time and work. You can learn all sorts of things by experimentation! And when you get right down to it learning is little more than organized trial & error! Finally, beginners PLEASE contribute to the FOGHORN! You know best what newcomers need to learn. We would be glad to start a special section for you, either question & answer or beginners contributions!

FOG Library Notes

(and Correspondence)

by Gale Rhoades

Many of you have inquired about getting a copy of the library if you are not able to come to the Bay Area meetings. Thanks to the many request for copies of the library that we had at the Faire, we have developed a fairly good system for getting copies out. Basically, it requires that everyone work together. If one person in any given area has a copy of the library, we hope that you will share with the others in your area.

I am keeping a list of everyone we send full sets to. Requests will first be referred to these members. For the others, you have two options. With Foghorn 8, there will be 35 discs in the library. You may either send blank discs with a check for \$5.00 to cover shipping, etc. or you may send \$5.00 per disc plus the \$5.00 for shipping or, if you want the whole library, send \$4.00 per disc plus \$5.00 for shipping. Make the checks out to FIRST OSBORNE GROUP. You may send the discs or checks to either P.O. BOX 11683-A, Palo Alto, CA 94306 or P. O. BOX 3051, Daly City, CA 94015. Please remember that it takes about two hours to make a copy of the entire library. Members who respond with orders for the library PLEASE be patient with us. While I have several people to help in making the copies, it will still take us a few days to check the list of who has copies and then to share the work around. Please include street addresses where possible as it is easier for me to ship via U. P. S.

One of the reasons we are keeping a list of who gets copies of the library is that we want to be able to set up a permanent library exchange for future additions. We hope that everyone will make contributions to the library so that all members can benefit. Please remember two things about your contributions. There can be no proprietary material in the library. If any of you find something which you know to be proprietary, please let us know so that it can be purged. Also, please, please document

ADVERTISEMENT*****ADVERTISEMENT

Osborne/Centronics Cable

P/N CJ-01-CENT-FM6

This is the cable required to connect from the Osborne IEEE-488 connector to a printer with the Centronics parallel interface. Gold plated connectors are used in this cable to assure highest standards of quality. Because of the high quality parts used we are happy to give a money back guarantee. This cable has been proven on hundreds of Epson, Okidata, and NEC dot matrix printers. Standard length is 6 feet, although cables up to 10 feet are available at \$2 per foot for each additional foot. An Osborne user can save over \$100 on his printer if he elects to use this cable and buy a parallel version instead of opting for a serial interface card plus cable to attach the printer to his computer. \$49.95

Osborne Keyboard Extender Cable

P/N CJ-01-KBDX-FM2

This cable allows operator to move the keyboard farther away from the O-1. It is especially helpful to those of you who have purchased an external video monitor for their computer and need to be away from their computer due to the larger video screen. \$24.95

Osborne Keyboard Replacement Cable

P/N CJ-01-KBDR-FF4

This cable provides a four foot cable for the keyboard. It has the advantage that it is less likely to disconnect if inadvertently tugged on by the operator. The cable will require about 5 minutes for a technician to install it properly. \$27.95

Null Modem Cable

P/N CJ-6P-NULM-MM6

As the technician oriented ones of you know, the Osborne 1 has it's RS-232 serial port configured as DCE and requires pin reversals to reconfigure it as DTE to work correctly with a modem. This cable could also be used to interconnect two computers with DCE interfaces i.e. use it to connect a Northstar Horizon* to an Altos**. It is a useful aid when you have to off-load programs via a communications link to get it on disk formats other than the standard 8 inch diskettes. \$34.95

Call or write:

C&J Electronics
1453 Yosemite Dr.
Milpitas, Ca 95035
(408) 263-6099 or 263-2588

* Northstar Horizon is a trademark of Northstar.

** Altos is a trademark of Altos Computer Systems.

any contributions you make. It is often very difficult to use a program without the documentation. If you have taken the program from another source, please list the credit. You should include in the documentation a brief note on the application(s). Please send contributions on a disc. Your disc will be returned after it is copied.

I want to take this opportunity to mention one other item. That is the matter of letters from members that seem to be taking forever to get an answer. If I know that subject has been covered in Foghorn, I cannot write a letter to each of you. If, after reading ALL of the issues, you still haven't gotten the needed information, let me know. My first priority must be getting new members on the list. After that, I juggle the library and letters. Sometimes, I don't have an answer for you. For that reason, I would like to remind you that this newsletter is for everyone and it should serve as an information exchange center. We have the members column and Letters to the Editor for this purpose. Since we now can typeset directly from discs, it will be much easier and faster if you will send your letters on a disc so that someone here doesn't have to retype it. Again, the disc will be returned to you.

While I can't afford to run my phone bill any higher than it already is, any of you who have questions may feel free to call me. The best time to get me is in the evenings or on the weekends since I must also earn a living. The number is 415-756-0821.

For those of you who have asked, our membership is climbing daily. At the last count, we were just shy of 500 paid members. We have members in nearly every state in the country with about a dozen overseas members. The membership list in this issue was out of date before it was finished but we had to cut off sometime. We will try to list the new members monthly and maybe do an annual recap. If you see any errors in the phone list or if your newsletters aren't being delivered to the right address, please let me know immediately.

CHRONICLE

SANTA CLARA Meeting April 15th

Mike Mehr reporting

April 15th's Santa Clara FOG meeting proved to be quite informative and fun, as always. First, a few highlights. It was announced that the Digital Deli now has the necessary patches for running 1200 baud serial printers and DTC printers with Osbornes, and they will also be on a disk in the FOG library. Bob Kavinoky is now our corporate secretary, and the incorporation is proceeding well. Frank announced that a firm named Small Computer Insurance out of San Jose is selling \$7500 worth of insurance for micros, both hardware and software, usually not covered by homeowners' policies, for \$50 a year. Their phone number is (408) 723-8107 (end of plug). It was mentioned that we should make our desires known to Osborne about which disk formats they should implement for the Double Density Option, noting that Zenith, Apple, TRS80, and Northstar, among others, are incompatible for physical reasons. Rick Utley from Computer Cannery, PO Box 23425, San Jose 95153, showed several wares, including cables, colored screen inserts, and a \$40 briefcase pouch that attaches with velcro to the Osborne case (you glue on the velcro, kit supplied). They also offer a 10% FOG discount similar to the Digital Deli. Olive Branch Associates, 1426 W. Winton Ave., Hayward, CA 94545, had a demonstration of the Olivetti Praxis 30 typewriter running off Wordstar on the Osborne. Olive Branch sells the interface and software, I understand.

After these announcements, the meeting moved into Phase II, hosted by our own Mel Cruets and Byron McKay, both of FOG and the Deli. These enterprising computerists (I may even apply the term "hacker" with impunity) are each System Operators of local Remote CP/M Bulletin Boards. Mel runs the Colossal BBS, henceforth to be known as OXGATE NODE 002, in his house in Milpitas at (408)263-2588. Byron's BBS, officially the Piconet BBS and titled OXGATE NODE 003, operates at his house at (415)965-4097. For completion, they mentioned OXGATE NODE 001, run by Sysop Paul Traina of Cupertino, at (408)287-5901. The OXGATE refers to the software that runs all three BBS's, written by Paul Traina and available to other sysops and prospective sysops at a reasonable

price. It is excellent software, constantly being updated (over the phone, of course!), and as such, may sport some bugs (read as "features"), so be patient. Byron then described access procedures for their BBS's. Mel's requires you to call, let it ring ONCE ONLY, hang up, and immediately call back to get his modem. Otherwise, your modem will be accessing his family, who do not speak at 300 baud. Byron announced that HIS board could be dialed directly, of course, and the good-natured battle of the sysops continued. Mel has several large HELP files to allow you to ask the system questions while you are online. Byron keeps the latest CPM Users Group disks online at the rate of 2 new ones each week. They both mentioned that any Osborne with MODEM7 and any 300-baud modem can access either BBS and get FREE SOFTWARE for the price of a (hopefully local) phone call. Those of you who are hopelessly confused by all this should read past issues of the FOGHORN to find The Modern Chronicles articles by yours truly, an excellent series if I do say so myself, temporarily defunct due to time pressures but soon to be revived in these very pages (end of unabashed plug #2!). You could also check out the latest issue (#4) of *Datacast* magazine for several good articles on modems and bulletin boards. Join the company of such greats as Thom Hogan and Adam Osborne, and call your favorite BBS today.

But I digress. Phase III of the meeting began as Rich Evans of Computer Service Company, the outfit that services our machines for the Deli, was introduced. He proceeded to antagonize the women present with several sexist jokes, but although he is a self-admitted male chauvinist, he did helpfully answer many questions from the audience about service problems many of us have been seeing, such as keyboard static sensitivity, shaky monitors, and flaky disk accessing with the old monitor ROMs. Although overworked, he offered everyone to bring in their machines to fix any existing problems. He also mentioned that Disk Drive Cleaning Diskettes should be avoided since they can easily damage the heads, and a Q-tip and isopropyl alcohol with a gentle touch is much more effective. (If you don't trust your touch, bring it in and they'll do it, for a nominal fee, of course.) Finally, he mentioned using dish detergent or fabric softener in dilute solution sprayed on carpets and other static sources near your Osborne as an effective and inexpensive static guard.

All in all, an informative evening. See you in May or on the BBS's.

SAN FRANCISCO OSBORNE GROUP Meeting 21 April, 1982 *by Peter Fleming*

The meeting was called to order at 8PM by Glenn Evans, President, in Room 205, Bldg C, Fort Mason Center.

Jim Schenkel, our representative on the FOG committee on Constitution and Bylaws, gave a progress report.

We are still awaiting formal permission from OCC to use the Osborne name in our title.

The Santa Clara FOG will be incorporated as a tax-exempt corporation.

There are several alternative ways of setting up the relationship between FOG and its local chapters. These are being explored by the committee.

Brian Gould suggested using the model of professional societies with local chapters. Each chapter could have a representative on the Board of Directors of the central group. Jim asked for a copy of the Bylaws of such a group to assist the committee in its work.

A question was raised about setting up regional groups with local subsidiary chapters. The objection to this is that the Library and the FOGHORN should be centralized. Regionalization would only fragment this effort.

The word "FIRST" in the title should be reserved for the umbrella group in Santa Clara.

The dues structure has not jelled, but it is likely that there will be both local and "national" dues, with each chapter collecting enough dues to meet its local costs, such as meeting space and printing and mailing of local notices.

Glenn asked for opinions re local dues, vs gate fees at meetings (not necessary if we get free space). At present we are asking for \$1.00 per

head per meeting for room rental, and have been about "breaking even".

As has become customary, each member was asked for a brief statement of his level of expertise, his present uses of the Osborne, and his interests and expectations of the group.

Kent Walker described the contents of the FOG Library, and asked for submissions from the members. The Library will be what WE make it, and help is needed from all.

Dave Blair talked about insurance for Osborne-1, and made available brochures on the Traveller's special policy.

Dave also has double-density disks for sale at a special discount.

Pete Fleming described the MUMPS package he has available, and offered to demonstrate it to those interested.

Frank Morton, our intrepid FOG President, strained his laryngitic vocal cords to announce that there is interest in starting a group in Santa Rosa. Anyone willing to help should contact Una Glass or Richard Fennell at The Matrix in Santa Rosa. (See "Editor's Notes" elsewhere in this issue for a meeting announcement.)

Glenn mentioned that he had trouble while using his Osborne in high temperature. This led to a brief discussion of heat dissipation, and a warning to be careful about using the computer in direct sunlight or very warm locations, and about enclosing it.

Some people have had DOS errors in WORDSTAR for obscure reasons. This can sometimes be overcome by simply hitting RETURN a few times, or by relogging the B drive (KL B:).

The meeting was adjourned to informal sessions at about 9:30.

WORKSHOPS: These will be held on the WEDNESDAY evenings preceding and following regular meetings, according to the following schedule:

4/28 - Intermediate and advanced

5/5 - Beginners

5/12 - WORDSTAR workshop

5/19 - Intermediate and advanced

6/2 - Beginners

The next REGULAR MEETING will be Wednesday, 26 May.

REPORT from the BOG (Boston Osborne Group) *by Jay Siegel*

The first meeting of the Boston Osborne Group (BOG) was in January. The meeting was organized under the auspices of the Boston Computer Society. We expected around 20 people to show up, but over forty came to that first meeting, the second meeting in February brought out over 60 people, followed by almost 100 in March. The April meeting resulted in around 60 people, due to the meeting date on Friday of a three day weekend.

To date we have had a meeting on each of the topics: comparing printers, communications, and CP/M vs. UNIX operating systems. We have started a newsletter, and have put out two issues.

As of now the only requirement for membership is that one be a member of the Boston Computer Society; there are no special dues for BOG. BOG is run by an informal executive committee. If our activities become to complex or require resources we might institute special dues for BOG.

CONTINUED REPORTS FROM THE WORDSTAR FRONT:

Most of the tips on Wordstar installation have been for the Epson MX-80, as befits the most popular printer. However, several of us in the Boston area have IDS 460's and 560's. This printer offers both serial and parallel interfaces, with many software controlled features: 10, 12, 16.8 CPI; fixed and proportional spacing; double width characters; sub- and super-scripting. Most of the Wordstar features work: bold and double strike, underlining, etc. However, the most interesting feature is the proportional spacing with right justification. Both proportional spacing and right justification are done via internal software in the IDS 460 and 560 printers. In order to take advantage of this feature, one creates a document using the IDS printer control characters, NOT the wordstar printer control characters. In place of the dot characters in the first line, use the IDS printer control characters to set the margins and turn on proportional spacing. Now after the document has been saved with KX,

PIP it to the printer device with the [Z] option: PIP IST:WSDOC.TXT[Z]. The printer control characters will set up the IDS with the correct margins, will proportionally space with right and left adjusted margins and the Z option strips off all the special Wordstar characters. The result will be a proportionally spaced document, with evenly spaced spaces and right and left adjusted margins! Since proportionally spaced characters take up less space than fixed space characters, you must increase your right margin. I use ^OR 85 for what would normally be a 65 space line. Not the easiest of procedures but it does work, and looks beautiful!

CONTINUED REPORTS FROM THE FUNCTION KEYFRONT:

What the world needs is another tip on how to use the function keys! Oh well, here goes another one. This one is geared for the IDS printer but with corresponding changes should work with other printers. If you have a tractor printer then you are very often "wasting" a page of paper when you tear off the finished material. The trick here is to use that sheet to create a printed record of the files on your disks. Assuming you have placed a disk label like "FOG025.102" on each of your disks to label it's contents, you can print the XDIR to the printer just before advancing the paper to tear off finished material, thereby leaving the disk directory on the paper left behind for the lead to the tractors.

9: C<CR> P<ES>CJ90<CR>A:XDIR B:<CR><ES>CJO\$<CR>
P<CR>

9: I put this on my 9th function control key.

^C Initializes the directory.

^P Turns on the printer.

<ES>CJ90 Is the program control to set left margin 3/4 inches.

A:XDIR B:<CR> Prints the directory to the printer.

<ES>CJO\$ resets the printer to 0 left margin.

^P Turns off the printer.

All this fired off with one function control key!

Just before signing off one can print several disk directories to the printer using the "last" tractor page for your disk catalog. The only problem I've encountered is that occasionally there is a CP/M prompt left in the printer's buffer that might appear in the next printed material if the machine's buffer isn't emptied. No problem when printing XDIR's just before signing off.

EDITOR'S NOTES

MONTEREY BAY AREA OSBORNE COMPUTER USERS' GROUP

The second meeting will be held at Hartnell College, CRAC building, room 209, Friday, May 21, 1982, 6:00 p.m. to midnight.

This meeting will be free of charge and the room is a typing room with ample workstations and electrical outlets. Printers are available. The plans include the use of a close circuit TV system to televise the Osborne CRT so the workshop demonstrations can be seen on a large TV monitor (thanks to the Audio Visual Dept.) Contact Marcia Miller-Dowdy for information (408-722-4272).

"NORTH BAY FOG GROUP"

A meeting to organize a FOG group in the North Bay area will be held May 21, 1982, 7:30 p.m. at:

Matrix Computer Systems

720 Mendocino Avenue

Santa Rosa

Contact Richard Fennell for more information (707-542-0571)

"I Can Use My Computer!" You may have seen these audio cassettes by Wordcraft advertised and thought of sending for them. Well, if you intend to buy—buy them from FOG (not only convenient but, you will be helping the treasury too!) Our special FOG prices are:

\$22.50 (tax included)—if you pick'em up.

\$25.00 (tax included)—by mail.

Call Gale Rhoades (415-756-0821)

You get two C-90 cassettes that lead you through an introduction to your Osborne 1 including, CP/M, WordStar, SuperCalc and BASIC. I just bought mine and after I am through with them I intend to use them to introduce the rest of my family to my Ozzie.

CHANGE

The new commercial advertisement rates for the FOGHORN are as follows:

\$50/full page, \$35/half page, \$20/quarter page.

Effective 4/15/82.


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OPTOMIST Screen Filter, ...\$ 7.95
 comes in GREEN, SMOKE
 or AMBER, attaches easily
 to the face of the OSBORNE
 in about a minute.

"THE FIRST ROW" Key ID strip.....\$ 3.99
 for your definable Keys.
 a 7 1/2" strip that is mounted
 just above the top row of keys
 1-0 and holds a black index strip
 where you write your functions
 with a white pencil (included).

KEYBOARD CABLE 4 Ft Replacement.....\$29.95
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 CRT in front of your keyboard &
 the OSBORNE off to the side.

PRINTER CABLE 6 Ft IEEE-Centronics.....\$47.95
 allows you to run your EPSON or
 NEC or ??? parrallel printer with
 your OSBORNE.

DETACHE' Removeable Attache case.....\$39.95
 mounts to your OSBORNE and has
 room for a box or two of diskettes
 the users manual a cable and whatever
 else you may wish to carry with.
 Comes complete with everything you'll
 need to install it on your system.

All items come with complete instructions and a limited 90 Day
 warranty

To Order send check or money order to:

Computer Cannery
 P.O.Box 23425
 San Jose, CA 95153
 (408) 226-3184

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Now, using our TypeLine system we can link to your Word/Data Processor. Over the phone. It's simple. Let the system do the work. Giving you state-of-the-art productivity.

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FOG MEMBER ANOUNCEMENT

Would you like a 50-cps daisy wheel printer for under \$1100? If so, give Keith Mount a call at (415) 921-8600. These are Diablo printers, completely rebuilt and under full warranty. Keith also offers an OCR service, for scanning documents onto Osborne or other media.

PERSONAL

If you work for the KORET division of Levi Strauss & Co., please call Jim Ahrens at (415) 284-5831.

SYSTEMS NOTES

FROM THE DOGHOUSE

by John Gaudio

Using a program called MODEM7, I have sent this article, and several others, by phone to my friends "IN THE FOG". I also use MODEM7 to send and receive pieces of "DOG BYTES", (the newsletter of the Denver Osborne Group, DOG) and to share.COM files, mailing lists, and any other CP/M files with my fellow Osborne1 users.

MODEM7 is in the FOG library on FOG Disk No.1. It has many uses, one of which is the performance of simple file transfers. In this article we'll look at one method of performing these transfers. With a little practice and experimentation, you'll find many more uses for this program.

Start with two Osbornes, copies of MDM7OS.COM, MODEM.DOC, and MODEM7.DOC from FOG Disk No.1, and an Osborne-to-modem cable*. I suggest starting with two Osbornes in the same room, and connecting their SERIAL RS232 ports together with the Osborne-to-modem cable. This allows you to see what's happening on each machine, and what you learn here will make transfers by phone (when you can't see the other machine, or talk to its operator) much easier to understand. Also read the MODEM7.DOC, and MODEM.DOC files. They're a bit cryptic to the novice, but you'll pick up some good points. After you've used MODEM7 a few times, read the.DOC files again. The experience you've gained will make them much clearer.

Now take two formatted disks, complete with CP/M on the system tracks, put MODEM7.DOC on one disk, MODEM.DOC on the other, and MDM7OS.COM on each. Make sure there's plenty of room, and that they are NOT write protected. Now you're ready to go. Put these disks into the left drives of the machines, then press the reset buttons and hit the return keys to boot the systems. When you get the A> prompt, type

```
MDM7OS<CR>
on each Osborne. The program will ask you for a command, and at this point the user with MODEM.DOC on the disk will type S MODEM.DOC to tell the system that it will Send a file named MODEM.DOC. The other user will type
R MODEM.DOC
telling the other system that it will Recieve a file named MODEM.DOC
```

In the real world, this is where you and your buddy would place the phones in the acoustic couplers of your modems, or hit the buttons, or send the strings of commands that activate whatever modems you'll be using. But for now we don't have to be concerned with all that. Just press the return key on each machine, and let your Osbornes do the work.

The machine sending the file will inform you that the file is open, that its extent length is 37H, and that it is awaiting something called the "INITIAL NAK". Don't be concerned about all this. Your Osborne (the sender) is just telling you how big the file is, (37H sectors), and that it's waiting for a message ("NAK") from the other system, (the receiver) saying that the receiver is ready to receive a file. Once NAK is received by the sender, the sending machine will inform you that it is going to "SEND #01". It then sends #02, #03, #04, etc., until it gets up to #37H. Don't worry if the count seems a bit odd, it's in something called hexadecimal, or HEX. We can write an article on HEX later. Meanwhile, on the receiving machine you'll see "AWAITING #01", "TIMEOUT", and then a sequence of "AWAITING #01", "AWAITING #02", etc., until, while "AWAITING #38", the receiver gets the word that the waiting is over. The last sector of the file has been sent and received, and all is well with the world! Now both machines inform you that "ALL TRANSFERS COMPLETED". If you followed all my instructions you'll find that the transfer took a little over 4 minutes. Now type

```
CPM<CR>
on the receiving machine, and use DIR to confirm that MODEM.DOC has in fact been transferred.
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You can use this technique with any files, on drive A, or B, simply by adding the A: or B: prefix. Try a transfer the other way now, sending MODEM7.DOC back to the computer that was doing the sending last time. Since MODEM7.DOC is about twice the size of MODEM.DOC, this transfer will take almost nine minutes. If you're feeling really adventurous, pull the RS232 plug for a few seconds during the transfer, then replace it. You'll notice a few mild complaints on each system, but the errors will be

detect ed, and the bad sector will be sent again. That's right, the system is constantly checking for errors, and retransmitting when it finds them.

Of course in the real world the Osbornes aren't likely to be in the same room. Each will need a modem, an Osborne-to-modem cable, and a phone. Remember to set one modem to Originate mode, and the other to Answer mode. It really doesn't matter which is which. Also set each modem for FULL DUPLEX. For details on these settings, consult the manual that came with your modem. Then use the Osborne-to-modem cable to connect the Osborne's RS232 port to your modem. If you are among the lucky few to have modems that can talk at 1200 baud, look more closely at the.DOC files mentioned above, and see how to change the baud rate with MODEM7. This will cut your transfer time by seventy five percent.

MODEM7 is also great for moving software from other CP/M systems to your Osborne. Many systems have a version of MODEM7 (or even MODEM4) running on them, and this makes it possible to transfer files that are on diskettes that won't work on your Osborne1 (like 8 inch floppies, or some hard disks).

I've tried to show just enough to get you started with MODEM7, so please take some time to go over those.DOC files, learn more, and enjoy! Yours From The Doghouse,
John Gaudio

* A simple Osborne-to-Modem cable, which will work with most modems, can be made by tying two male RS232 connectors together like this.

2 -- 3

3 -- 2

7 -- 7

NOTE <CR> indicates a carriage return.

BEEP THE BEEPER

Submitted by Bob Briggs

Looking through the FOG and CP/M disk libraries the other day I noticed an interesting program called "TEACH" that purported to teach morse code. The problem was that the programmer had never heard of the OSBORNE 1 and had not taught "TEACH" how to beep the OSBORNE beeper. Of course, beeping the beeper is quite mandatory for a morse code program.

Exploring things documented (like the schematics OSBORNE sent me) and the undocumented (like most of the OSBORNE CBIOS), I found how to beep it, which is what this article is about.

The most obvious way to beep the beeper is to use the ASCII BELL character. This is done by hitting control G when you have the CP/M prompt, or by the statement PRINT CHR\$(7) in BASIC. However this isn't very satisfactory if you want to vary the length of the beep for the dits and dahs of morse code.

There are at least a couple of ways to control the duration of the beep when beeping the beeper. I'll demonstrate one way with a program written in MBASIC and another way with an assembly language routine.

As shown on sheet 5 of the schematics, the beeper (labeled audio alarm) is driven from bit 5 of port B of a 6821 peripheral interface adapter (PIA) chip. Also evident is that in addition to the beeper, this chip controls what is displayed on the screen and turns the two disk drive motors on and off. Also, the only way to talk to this chip is in shadow mode.

When CBIOS (the CP/M Basic Input/Output System) sends data out to the screen, it checks EF62 hex in RAM to see whether the beeper and the disk drive motors should be on or off. Bit 5 controls the beeper, bit 6 drive A, and bit 7 drive B. Bits 0 through 4 apparently have something to do with the vertical position of the text on the screen (which line is on which row). The following BASIC program demonstrates control of the beeper by setting bit 5 on or off and then sending a character to the screen in order to output data via the PIA chip.

```
10 REM: PROGRAM TO BEEP THE BEEPER
20 INPUT "ENTER A NUMBER FROM 1 TO 5, THEN HIT CR: ";N
30 IF N>5 THEN 120: REM: EXIT IF N>5
40 FOR I=1 TO N:GOSUB 60:NEXT I: REM: BEEP N TIMES
50 GOTO 20: REM: LET'S DO IT AGAIN
60 POKE &HEF62,&H20: REM: BEEPER FLAG ON
70 PRINT I: REM: TURN ON BEEPER
80 FOR J=1 TO 250:NEXT J: REM: SETS BEEP DURATION
```

```
90 POKE &HEF62,0: REM: BEEPER FLAG OFF
100 PRINT:REM: MUST WRITE TO SCREEN TO AFFECT BEEPER
110 RETURN
120 PRINT:PRINT"EXIT IF >5":PRINT
130 END
```

This next routine, which must be located above 4000H to avoid THE SHADOW, turns on the beeper for a duration determined by the LXI B and LXI D instructions. The routine drives the PIA directly rather than going through CBIOS as in the MBASIC program above.

LABEL	INSTRUCTION	COMMENTS
BEEP	CALL 0EBC9H	:ENTER SHADOW MODE
	LDA 2C02H	:GET PIA STATUS
	ORI 20H	:SET BIT 5
	STA 2C02H	:BELL ON
	LXI B,2	:SET DELAY LENGTH
	CALL DLY1	:WAIT
	LDA 2C02H	:GET PIA STATUS
	ANI 0DFH	:RESET BIT 5
	STA 2C02H	:BELL OFF
	CALL 0EBD7H	:LEAVE SHADOW MODE
	RET	:EXIT
DLY1	LXI D,0	:DELAY SUBROUTINE
DLY2	DCX D	
	MOV A,D	
	ORA A	
	JNZ DLY2	
	DCR C	
	JNZ DLY1	
	RFT	

In my OSBORNE (MONITOR 1.2) the routines at EBC9 and EBD7 contain the code for entering and exiting shadow mode. If this is not true for your OSBORNE, you'll have to find them, or use the routines shown on page 8-2 of the OSBORNE 1 User's Guide (looseleaf version). Address 2C02 is Port B of the Video PIA (page 8-38 of User's Guide).

NEC 8023 V.S. EPSON MX-80

by Jim Wooley

Whenever you buy a computer related product (hardware or software) you can be sure that six months later a new product will be introduced you will wish you had purchased. This relates to the NEC 8023A printer.

I have an Epson MX-80 F/T without Grafrax. It's a great printer at a very reasonable price. However, if you are planning to purchase a new printer, I suggest you evaluate the NEC 8023. It appears that the 8023 has features comparable to the MX-80 F/T with Grafrax at a comparable price. In the following, I have tried to provide some comparison information to aid your purchase decision. It should be noted that I am not very familiar with Epson's Grafrax, so I may miss some features provided by that option.

1. The NEC prints at 100 characters/sec, 25% faster than the Epson. Line feeds are twice as fast with the NEC.

2. NEC's print buffer is larger. Spec sheets I have reviewed are not very definitive on this point, but I believe the NEC buffer is 2K (2,048 characters) while Epson's is one line. This means that the computer can finish sending text to the printer and become available to perform additional tasks while the 8023 is still busy printing from its buffer. The impact will be more apparent for short documents (about one page), since long documents will tend to keep the buffer full and the computer waiting to transmit text.

3. The NEC 8023 has six alphanumeric character sizes to MX-80's four. In terms of characters per 8" line:

NEC 8023:
40 - enlarged pica
48 - enlarged elite
68 - enlarged condensed
80 - pica
96 - elite
136 - condensed

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* Osborne 1 is a registered trademark of Osborne Computer Corporation

Epson MX-80:

- 40 - expanded normal
- 66 - expanded condensed
- 80 - normal
- 132 - condensed

4. NEC's alphanumeric character matrix is 7×9 (horizontal × vertical). Epson's 9×9 matrix tends to give a more dense and, therefore, better formed character. NEC compensates by providing a proportional sized character set which may be selected upon demand. This is referred to as an N×9 matrix, where N is large or small depending upon whether the character is wide (like W) or narrow (like i). The result is a very well formed letter. In effect, this provides two more character sizes—normal proportional and enlarged (double wide) proportional—for a total of eight.

5. The 8023 has built-in Greek letters and scientific document symbols. I am told that Grafrax provides some similar capability, but it may not be so easily utilized.

6. Epson's Grafrax provides italics, which are not available from NEC.

7. NEC's built-in graphics symbols are in 8×8 matrix format and are generally more useful than Epson's 6×12 graphics.

8. The 8023 comes with dot graphics capability and with friction as well as tractor feed. These must be specifically purchased for the MX-80—Grafrax and F/T options.

9. For special applications, the NEC can resolve vertical spacing to 1/44 inch, twice as fine as the Epson. Reverse paper feed may be programmed into the NEC; the MX-80 can feed in one direction only.

10. The MX-80 F/T's tractor is down-stream of its print head. This may provide more positive paper positioning, but it forces you to waste one sheet each time you wish to align the top-of-form. NEC solves this problem by locating the tractor up-stream of the print head.

11. The 8023 is 50% heavier and uses 80% more power (180 W when printing) than Epson's MX-80.

12. The most objectionable feature of NEC's printer is the noise it makes when moving its print head and ribbon assembly horizontally.

If you plan to purchase a printer for your Osborne 1, my recommendation is that you do some comparison shopping. I hope the information provided above will facilitate your choice. If you select a NEC 8023, the following article will enable your efficient use of that printer with WordStar.

WORDSTAR WITH NEC 8023A

by Jim Wooley

In the March FOGHORN I described how to patch WordStar to make use of the special printing characteristics of the Epson MX-80. This month I would like to do the same thing for the NEC 8023A printer.

The facility for modifying WordStar is described in detail in Section 14.4 of the MicroPro WordStar User's Guide. Unfortunately, those of you who purchased the Osborne 1 within the last few months did not receive a copy of that document. OCC apparently stopped providing it (as well as the MicroSoft MBASIC manual) when Thom Hogan's new Osborne 1 User's Guide was introduced. I have not yet had an opportunity to review the latter, but I'm sure it must also have a description of WordStar customization.

Once WordStar has been modified, its print control characters (identified by ^ in the following) will enable use of NEC's special printing features. Section 10 of the MicroPro WordStar User's Guide, or the comparable section in the Osborne 1 User's Guide, describes use of print control characters. Also, WordStar's P menu outlines these controls.

The following step-by-step procedure will enable you to install the necessary patches to customize WordStar for use with the NEC 8023.

1. Put a copy of your WordStar disk in drive A. Put a disk containing INSTALL.COM (probably your CP/M Utilities disk) in drive B. After the CP/M prompt, execute INSTALL using A>B:INSTALL
2. Answer the first question regarding "normal first-time INSTALLation" with N for NO.
3. Answer INSTALL's next question with option D to modify and replace your existing WS.COM file. When asked for WordStar filename, answer A:WS.COM.

4. INSTALL then asks about your terminal, printer, communications protocol, and printer driver. Answer U for UNCHANGED and Y for YES to each.

5. The next question asks if modifications are complete. Answer N for NO in order to make additional patches. INSTALL's instructions will indicate that a location to be changed may be described by LABEL: +n, where the colon signifies a named location label and +n is an optional offset. n representing a hexadecimal integer. This notation is used in the following. Note that successive locations may be indicated by responding to the question "LOCATION TO BE CHANGED" simply with <RETURN>. Once the location has been identified, a hexadecimal value may be entered to replace its original contents. This substitution will be signified in the following by = nn, where nn is the new hexadecimal contents for that byte.

6. Patch PSCR: = 01 for more efficient operation of the NEC. My version of INSTALL did not recognize PSCR: so I referenced location 06A1 (without a colon) instead. Skip this step if you are using the Osborne RS232 serial printer interface port.

7. To enable use of subscript (^V) and superscript (^T), make the following patches:

```
PSCRLF: = 03          PSHALF: = 02
PSCRLF: + 2 = 1F      PSHALF: + 1 = 0D
PSCRLF: + 3 = 12      PSHALF: + 2 = 0A
```

Additional patches to PSINIT: and PSFINI: in step 11 will provide half-line spacing for subscripts and superscripts.

8. To use alternate character pitch (A) for elite mode (96 char/line) and standard pitch (N) for pica (80 char/line), patch the following:

```
PALT: = 02          PSTD: = 02
PALT: + 1 = 1B      PSTD: + 1 = 1B
PALT: + 2 = 45      PSTD: + 2 = 4E
```

9. The four user functions enable use of NEC condensed (136 char/line), proportional, and enlarged (double wide) modes. Use of these functions is described after step 12. Patches are

```
USR1: = 02          USR2: = 02
USR1: + 1 = 1B      USR2: + 1 = 1B
USR1: + 2 = 51      USR2: + 2 = 50
USR3: = 01          USR4: = 01
USR3: + 1 = 0E      USR4: + 1 = 0F
```

10. The change ribbon color toggle (^Y) may be used to set or cancel NEC's emphasized mode. Patch

```
RIBBON: = 02          RIBOFF: = 02
RIBBON: + 1 = 1B      RIBOFF: + 1 = 1B
RIBBON: + 2 = 21      RIBOFF: + 2 = 22
```

11. For initializing and restoring the NEC print modes, patch PSINIT: and PSFINI: Since my version of INSTALL did not recognize PSFINI:, I have referenced everything to PSINIT:

```
PSINIT: = 10          PSINIT: + D = 1B
PSINIT: + 2 = 1B      PSINIT: + E = 5D
PSINIT: + 3 = 4E      PSINIT: + F = 1B
PSINIT: + 4 = 1B      PSINIT: + 10 = 66
PSINIT: + 5 = 24      PSINIT: + 11 = 07
PSINIT: + 6 = 0F      PSINIT: + 12 = 1B
PSINIT: + 7 = 1B      PSINIT: + 13 = 4E
PSINIT: + 8 = 22      PSINIT: + 14 = 0F
PSINIT: + 9 = 1B      PSINIT: + 15 = 1B
PSINIT: + A = 54      PSINIT: + 16 = 22
PSINIT: + B = 31      PSINIT: + 17 = 1B
PSINIT: + C = 32      PSINIT: + 18 = 41
```

12. Strikeout and underline are best represented by two of the NEC graphics mode characters. These are specified by the following

```
SOCHR: = 95          ULCHR: = 80
```

These are all of the patches required to use the special NEC printer features. WordStar's print control characters will enable these features as follows:

^Y = Emphasized print on/off toggle. Do not use with Q, since the NEC can not print condensed pitch in emphasized mode.

^A = Elite pitch (96 char/line)

^N = Pica pitch (80 char/line). This is the default mode.

^Q = Condensed pitch (136 char/line). Do not use with Y.

^W = Proportional pitch. Do not use with right margin justification, since WordStar will not be able to calculate the spacing correctly. Do not use with backspace (H) for the same reason.

^E = Set enlarged pitch (40 char/line if used with pica N, 48 char/line if used with elite A, 68 char/line if used with condensed Q, or double wide proportional if used with W). ^R = Cancel enlarged pitch. This is the default mode.

All of the other print control characters function as described in WordStar documentation. Subscript and superscript toggles ^V and ^T make use of half-line spacing.

Use of these WordStar print control characters with the NEC 8023 is a little more versatile than comparable use with the Epson MX-80. For example, the NEC permits mixing pica, elite, and condensed in the same line, while the Epson will not print normal and condensed modes together. Also, setting enlarged mode on the Epson is only good for one line; the NEC will print enlarged until that mode is cancelled.

To finish off, you should customize the WordStar sign-on message to indicate use of a NEC 8023A printer. This is done by substituting the following values beginning at location 01B4: 4E, 45, 43, 20, 38, 30, 32, 33, 41, 20, 50, 72, 69, 6E, 74, 65, 72, 20, 20, 20, 20.

All of the patches described herein may be done using DDT instead of INSTALL. If you feel more comfortable with DDT, following is a list of labels and the locations they represent.

Label	Location	Label	Location
PSCRLF:	0696	USR3:	06D3
PSCR:	06A1	USR4:	06D8
PSHALF:	06A8	RIBBON:	06DD
PALT:	06B5	RIBOFF:	06E2
PSTD:	06BA	PSINIT:	06E7
USR1:	06C9	SOCHR:	070B
USR2:	06CE	ULCHR:	070C

You may also use this list to check yourself while using INSTALL.

LEARN MORSE CODE ON YOUR OSBORNE!

Submitted by Bob Briggs

The program TEACH from the CP/M User's library has been modified to work on the OSBORNE 1 and is now in the FOG library. This program will teach you morse code using the OSBORNE 1 beeper.

There are two programs: TEACH.ASM and TEACH.COM. All you need is TEACH.COM unless you want to modify the program, in which case you will need TEACH.ASM.

To run TEACH.COM, get the CP/M prompt A> or B>, depending on which disk contains the program, and then type TEACH<CR>. The screen will show a column of letters along the left margin, each followed by a row of asterisks.

Type any key to begin. Oh, the program will only recognize capital letters. You will hear the morse code for the letter G (dah dah dit) and you should type the letter G before the answer, which is G, appears on the screen. If you hit the correct key the answer will immediately be shown and the next letter sent. If you hit the wrong key, after a short delay the answer will be shown and the letter repeated.

After you have responded correctly to the letter G a few times, the program will send you a new letter. The more correct answers, the more new letters.

You can check your progress by holding down the RETURN key until the screen shows the rows of asterisks again. The more correct responses you have given for a particular letter, the less asterisks on the row for that letter. The bottom row of asterisks, adjacent to the % sign, gives an averaged indication of your recent progress.

At this point you can continue by hitting any key, or you can start over by hitting ESC, or you can exit with CONTROL-C.

The speed is set pretty slow. You can vary the speed by modifying the program as follows.

1. Load the TEACH.ASM file with Wordstar using the N command. Do NOT use the D command.
2. On the line FREQ EQU 4000 change the number 4000 to suit your fancy. I have tried 4000, 3000, and 2000 so you can be confident the program will work for these. The smaller the number, the faster the speed.
3. Save the modified program with the KD command to a disk with about 30K or more free space remaining.

4. Remove the Wordstar disk, insert the CP/M Utilities disk in drive A, press RESET, then press RETURN.
5. Place the disk containing TEACH.ASM in drive B.
6. Type ASM B:TEACH.BBZ. See OSBORNE 1 User's Guide page 6-4 (loose leaf version) if you want different options.
7. Type LOAD B:TEACH and wait.
8. Type B:TEACH to run the revised program.
9. You can erase the TEACH.HEX file after the LOAD command has finished.

A Stand for Your Osborne-1

from Kent Walker

KER-LUNK!!! That's the sound an Osborne-1 makes when slipping off the back of its keyboard and falling on a table. Although the O-1 is rugged, most people can not long stand the emotional strain of wondering when the case may slip again and whether the machine will work afterwards.

Many alternatives have been tried. First, one can simply rest the body of the unit on the work surface. This soon leads to an uncomfortably deformed neck position which may cause "terminal hunchitosis" in dedicated programmers. A tower of old Sears catalogs works well for a while to hold the screen up at eye level, although you can never tell when or in which direction the whole stack will begin to slide.

As a solution to this dilemma, the stand illustrated may well serve your purpose. Made of scrap 1/2 in. plywood, some glue and finishing nails, it positions the O-1 properly for use on a desk or table, allowing you to move the keyboard where you wish.

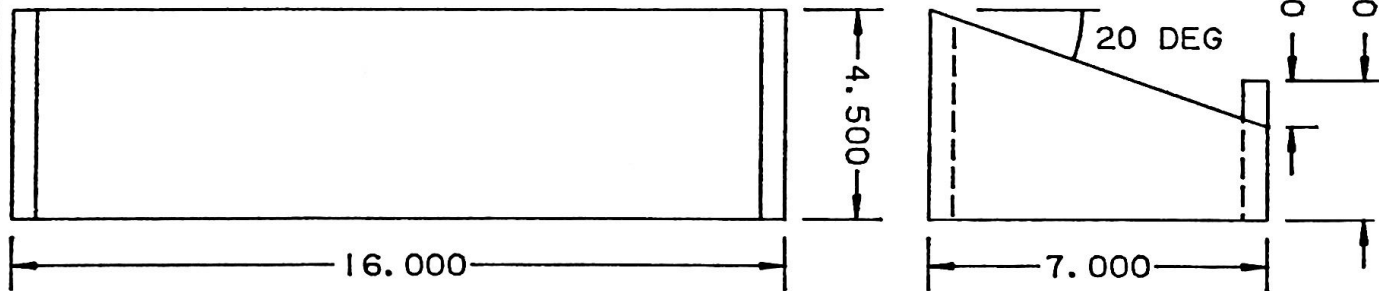
The tilt angle is the same as obtained when resting the case on the keyboard and the height brings the screen up to eye level. The hollow interior answers the question "Where do I put the cord cover when I'm using the machine?"

Construction hints: pad the edges where the stand contacts your O-1 with sticky-backed foam weather stripping to prevent marring the case. Paint the stand in regulation O-1 beige and black or express yourself with your favorite colors.

Do your Ozzie a favor: put it up on a pedestal and say goodbye to the KER-LUNK blues.

CONTACT KENT WALKER FOR THE DRAWING.
(415) 359-1227

0.500
TYP



THE OSBORNE 1's RS-232

by Mike Marzalek

For those interested in building their own serial cable for interfacing the Osborne with RS232 devices, I have discovered some misleading information in the Osborne manual.

First, the line which outputs data is called "receive data" and is pin #3, not "transmitted data". These two lines are apparently swapped.

Second, a busy flag coming back from a printer to indicate that its buffer is full must go to DTR pin #20. It is implied, in the manual, that it could have been routed to RTS instead. This does not work evidently, because the Osborne does not test this line as often. RTS is useful for shutting down the RS232 for conditions such as out of paper or printer not in "REMOTE".

The Osborne output is either 8 bits or 7 bits with parity, I couldn't tell which.

ALSO

To connect the Osborne to the Okidata Microline 82A on the serial bus the following works.

The Osborne works as shipped from the factory.

At the printer, set switches SW1 thru SW6, on the front panel board, to off, SW7 & SW8 on.

At the printer serial board in back set SW1 & SW2 on, SW3 off, SW4 on, SW5 & SW6 off.

At the printer SP1 is set to side A.

Now build the cable to connect them.

Osborne	82A	Signal Function
Pin #1	Pin #1	FRAME GROUND
Pin #3	Pin #3	DATA (LOW TRUE)
Pin #20	Pin #11	BUSY (LOW TRUE)
Pin #4	Pin #6 & #20	SELECTHIGH
Pin #7	Pin #7	SIGNAL GROUND

ANNOUNCEMENT

LEARN—TEACH OSBORNE

There are many Osborne users who desire instruction in "how to make the machine go". And, there are those who can teach "how to make it go". Lets get these people together. Fill out the form below and send it to FOG c/o Tom Mac Fadyen, P.O. Box 11683-A, Palo Alto, CA 94306, and Tom will coordinate getting students and teachers together. Check the appropriate lines below.

NEED INSTRUCTION IN: YOU WILL TEACH

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☐ MBASIC
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Dear Members:
 We've had some publishing problem, hence this late issue. And, in order to get caught up, June and July FOGHORNs will be combined as one issue. The deadline for that issue is a FIRM June 21st. Anticipated mailing is July 7th.

FOGHORN
 c/o David Oates
 P.O. Box 11683-A
 Palo Alto, CA 94306



MAP TO FOG Meetings

NOTICE: DO NOT Enter DYSAN through the Front Door! Go around the building to the North Parking Lot! ONLY Enter through the Side Door marked X on this map. It is near the Auditorium where we meet. Otherwise DYSAN Security will ask us to leave!

